Consideration of Assortment Decision Criteria
: Men's Wear vs. Women's Wear and Male vs. Female Retail Buyers

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Abstract

Purpose – The purpose of this paper is to examine how clothing retail buyers (i.e., retail buyers, merchandisers, and storeowners), who are involved in assortment planning and retail buying use assortment criteria in their decisions. Comparisons are made between criteria used by men's wear and women's wear retail buyers as well as criteria used by male and female retail buyers.

Research design, data, and methodology – A structured questionnaire was developed to collect data both in English and Korean. After conducting two pilot tests, the survey was conducted in Seoul, South Korea. Mantrala et al.'s 17 inputs of product assortment planning model with 23 assortment criteria from other previous studies were used.

Results – Significant differences existed in consideration of assortment criteria between men's wear and women's wear retail buyers as well as between male and female retail buyers. Men's wear retail buyers rated the importance of sales history criteria (i.e., sales history, previous year's sales of same/similar styles) significantly lower than women's wear buyers did. Female retail buyers rated sales history criteria and weather criteria (i.e., unpredicted weather change, forecasting information of weather) significantly higher than male retail buyers did.

Conclusions – This study provides guidelines for retail buyers regarding what criteria to use in what situations and how to organize assortment criteria from the most important criterion to the least one. In addition, the findings help them understand other retail buyers' buying behavior.

Keywords: Retail buyer, Assortment criteria, Decision, Gender, Clothing.

JEL Classifications: L81, L20, M310.

1. Introduction

The role of retail buyers (i.e., clothing retail buyers, merchandisers, storeowners) includes both an operational element (e.g., buying and distributing products) and a strategic component (e.g., speeding to market and lowering costs). Although retailer's assortment planning is an exact quantitative decision what to buy and how many SKUs to purchase, providing right products to right stores at right time to satisfy customers, retail buying has changed from an operational focused process to a strategic-oriented process (Bruce & Daly, 2006). Retail buyers need to consider customer demand more carefully as they plan for future

sales. This strategic-oriented process may be more important for small retailers because compared to large stores (e.g., supper market) which belong to large corporations, small retailers do not have a strong buying power that can lower cost by purchasing a large amount of products at once (Yoo & Lee, 2011). Consumers are more likely to shop online and retail channels, and the retail buyers' roles have become more complicated than before (Cho & Workman, 2011; Kim, 2017).

Retail buying falls into organizational buying, which is different from consumer buying. Only a small number of academic research studies about retail buyer behavior are found in the literature in comparison to the wealth of consumer buying behavior studies in academic literature (e.g., Wagner et al., 1989; Kline & Wagner, 1994; Silva et al., 2002; Perry & Kyriakaki, 2014). Although available research is limited, assortment planning is one of the most

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critical and complex decisions that retail buyers must make (Bahng & Kincade, 2014). Retailers consider assortment planning as a high priority for their business because the assortment a retailer carries has a great impact on firms' financial performance (i.e., sales & profits; Kok et al., 2006). Product assortment related factors have a significant impact even on consumers' impulse buying behavior (Prashar et al., 2015). Therefore, consideration of which assortment criteria to use in planning is an important issue that may determine the success of assortment plans, which can in turn influence on a firm's financial performance. Previous researchers (Mantrala et al., 2009) suggest that successful assortment planning should balance among (a) variety of products, (b) depth of products, and (c) each stock-keeping unit (SKU). The balance between variety (or breadth) and depth and/or between depth and inventory for each SKU of an assortment is an extremely important strategic decision made by most retailers and is a fundamental responsibility of retail managers. In the fashion industry (i.e., clothing and textiles), the inventory level for each style especially good or best-selling merchandise significantly influences a firm's revenues and profits. Retail buyers must make accurate decisions the first time, many times long before the selling season because it often takes weeks or months for re-ordered products to be delivered. Because of fast-fashion with quickly changing trends, customers will not wait for products to be replenished or replaced. To meet consumer demands, clothing retailers need to build saleable assortment plans for each SKU by creatively forecasting the upcoming season, using all quantitative and qualitative data that they can acquire (e.g., recent years of sales data, fashion trend information). The assortment planning decisions becomes critical for retail success.

2. Literature Review

2.1. Decision making in retail buying

Some decision criteria for industrial buying correspond to retail buying because both retail and industrial buying fall under organizational buying (Wagner et al., 1989). In a classic industrial buyer behavior model, Sheth (1981) suggested that buyers make two major buying decisions: (a) supplier selection, and (b) product selection and buying. Before buying products from manufacturers or wholesalers, retail buyers select suppliers (i.e., vendors), which offer merchandise to help the retailer reach its sales and profit goals for the year. While retail buyers consider sales history, markup, and merchandise delivery as the most important criteria in the supplier selection procedure (Wagner et al., 1989), retailers take into account additional variables (e.g., target market demand, environmental force) in the product selection and buying process.

Retail buyers are responsible for seeking solutions to various decision making problems, including supplier selection, product selection and purchase, retail price establishment, and markup or markdown level adjustment. Among these major decision making problems for retail buyers, the product selection and buying decision are one of the most complex multi-criteria tasks, and requires both qualitative and quantitative evaluation of products and the ability to forecast future sales. Ettenson and Wagner (1986) defined retail buying as a decision making process where the retail buyer identifies, evaluates, and selects products for resale to customers. Fiorito and Fairhurst (1989), based on a survey of 153 buyers, suggested that the retail buyer's responsibility in buying decisions includes planning, analyzing, purchasing, and controlling products in which they invest. The collection of retail buying decisions has been considered the most difficult and important process because the decisions play a key role to determine the success or failure of the product lines carried each season. Fiorito and Fairhurst (1989) reported that a complicated mental process is most frequently used for the decision-making process for clothing retail buyers.

2.2. Mantrala et al.'s product assortment planning (PAP) model and decision criteria in retail buying

Previous studies about clothing retail buying behaviors have demonstrated a number of criteria that practitioners consider when planning assortment and buying. Mantrala et al. (2009) introduced a conceptual model that described retail buying behavior based on the decision making for product assortment planning (PAP) in their study. In this study, the researchers reported that 17 "inputs" are the assortment decision criteria and that retail buyers have to consider these criteria when making assortment plans (see <Table 1>). The PAP inputs include three groups of decision criteria: (1) consumer perceptions and preferences, (2) retailer constraints, and (3) external environmental criteria.

Nilsson and Host identified a number of criteria considered when retail buyers evaluate suppliers, and 17 criteria among their list have associations to clothing products and were reviewed for this research study. Kang and Kincade (2004) had an additional list of criteria for clothing retailers when making assortment decisions that fell within Mantrala et al.'s groupings (see <Table 1>). In addition, other research studies contained selected criteria. Swindley (1992) reported that profit, sales volumes, product quality, and delivery time are very important criteria in the retail buying decision process. Criteria from other research studies (Duncan, 1972; Sheth, 1981; Silver et al., 1998) are also suggested for retail buyers to consider (see <Table 1>).

<Table 1> Assortment Decision Criteria for Retail Buying from Previous Research Studies

Criteria category	Mantrala et al. (2009)	Nilsson & Host (1987)	Kang & Kincade (2004)	Other Research Studies
Consumer perceptions and preferences	Desire for flexibility, Preference instability, Too much choice	Tactical considerations	Minimum order quantity	
	Actual vs. Perceived variety, Global vs. Local Utility	Product's psychological characteristics, Packaging	Style selection	Product quality, delivery time (Swindley, 1992)
	Search costs	Overall profitability, Rate of turnover, Product markups and costs, Retail price	Pre-test run results, Sales history, Seasonality	Profit and sales volume (Swindley, 1992)
	Substitution behavior	Relations to other products		
Retailer constraints	Physical space	Distributive criteria	Company or store size	
	Market position	Product's physical characteristics, Sales potential	Evaluation and fashion-ability of product, Sales potential of the item	Types of products (Sheth, 1981)
	Brand image, Private vs. National brands	Existence of private brands		
	Budget		Open-to-buy dollars	
	Format choice		Remaining stock level	Inventory (Silver et al., 1998)
Environmental criteria	Competition related assortment trends	Competitive considerations	Competitor's products	Competitor component (Duncan, 1972)
	Changing economic & environmental conditions	Economic conditions	Fashion trend, Weather forecast, Unpredictable weather change	Socio-political component, (Duncan, 1972),
	Shifting consumer profile & lifestyle trends	Overall consumer value	Target market taste and characteristics	Customer component (Duncan, 1972)
	Changes in trade areas	Supplier marketing and supplier characteristics	Agreement with vendors, Vendor's opinions	Suppliers component (Duncan, 1972), Business negotiations (Sheth, 1981)

2.3. Gender Differences in Buying Behavior

In the field of consumer behavior, a number of research studies have provided gender differences in buying or shopping behaviors (e.g., Fischer & Arnold, 1994; Kongsompong, 2006; Rajagopal, 2011; Rajput et al., 2012). Fischer and Arnold (1994) suggested that male and female shoppers respond to products on the market in different ways due to their cultural differences related to gender roles. Peter and Olson (1999) reported that men and women process information differently, and Berni (2001) and Chiger (2001) found that male and female shoppers do shopping task differently. As an example of the differences, men prefer more luxury and leisure items including video games and sports equipment while women are more attracted to products that may create an impression and expression of their personality such as clothing and accessories (Rajput et al., 2012).

As researchers have widely shown, women's buying behavior is based on emotion more than men's buying behavior, some researchers have suggested that female shoppers are more susceptible to impulse purchasing.

However, other researchers have argued that these differences are because women shop more often than men do. If the number of shopping events is constant, men may have the same degree of susceptibility to impulse purchases to women's (Kollat & Willett, 1967). These studies suggest that gender may influence buying in consumer behavior; therefore, gender may be a factor in retail buying. Although seemingly an important variable, only a few research studies about gender difference in retail buyers' buying behavior are in the literature. Neu et al. (1988) indicated that gender difference exists in buyer-seller negotiation performance and in behavior. However, in the study, the researchers also referred to the weak influence of gender on buyer-seller negotiations between experienced business people. Sometimes generalization of gender difference for thinking or shopping behaviors may be regarded as stereotypes. Da Silva et al. (2002) examined linkages between buyer characteristics (i.e., age, experience, gender, type of products) and the decision-making process by interviewing 100 UK clothing and textile retail buyers. They found that age was the dominant variable that differentiated their decision making. This finding supported Davies' earlier results (1994) that younger, less experienced but better

qualified buyers consider more objective criteria in their buying decision process. Bahng and Kincade (2014) suggested, in their retail buyer segmentation research that when making assortment decisions male buyers consider fewer criteria than female buyers do. In the study, the researchers also reported differences in importance of criteria for retail buyers between men's wear and women's wear. No research study with statistical analysis found in the literature investigated the differences among assortment criteria use between gender of retail buyers and between buyers of men's wear vs. women's wear. Therefore, the purpose of this study is to examine how clothing retail buyers use assortment criteria in their assortment planning decisions. Comparisons are made between genders (male vs. female) and between product categories (men's wear vs. women's wear). From the previous literature on gender difference in consumer buying behaviors, the researcher anticipated that male retail buyers consider fewer criteria when they make assortment plans than female retail buyers do. The researcher also assumed that men's wear retail buyers consider all assortment criteria as less important than women's wear retail buyers do. By using Mantrala et al.'s PAP model and assortment criteria for clothing products from previous research studies, the following hypotheses were formulated for this study.

<H1>: Men's wear retail buyers consider all assortment criteria as less important than women's wear retail buyers do.

<H2>: Male retail buyers consider all assortment criteria as less important than female retail buyers do.

<H3>: There is a significant difference in consideration of assortment decision criteria between men's wear retail buyers and women's wear retail buyers.

<H4>: There is a significant difference in consideration of assortment decision criteria between male retail buyers and female retail buyers.

3. Methodology

3.1. Sampling and data collection

The researcher conducted a survey of 378 clothing retail buyers (i.e., retail buyers, merchandisers, storeowners) who are in charge of actual assortment planning and buying in Seoul, South Korea. The participants of this study were not limited by age, gender, years of experience, or size of the retailers for which they work. After IRB approval for this study of human subjects, two pilot tests were conducted - first with 27 American respondents with retail experience and second with five Korean retail buyers, neither pilot test group were included in the final study, were conducted. This study used convenience and snowball sampling by surveying

clothing retail buyers. Although this convenience sampling seems to be narrow, the units in the sampling frame are actually quite large in number and are diverse in composition. The researcher visited each retail company/ store and attended meetings to distribute hard copies of the questionnaire. Only those who met the sample requirements (i.e., clothing retail buyers, merchandisers, storeowners involved in both assortment planning and buying) were included in data analysis. Of the 378 completed survey questionnaire, 237 usable questionnaires were analyzed after adopting the listwise deletion method. In addition, if the participants were engaged in both men's and women's wear, or children's wear, their data were deleted.

3.2. Instrument

The survey questionnaire contained two sections: (a) importance of assortment decision criteria and (b) buyer and company demographics. Several types of Likert-scales were used for the questions in the two sections. Questions were adapted or modified from items used in previous research studies (e.g., Arbuthnot, 1997; Grewal & Slotegraaf, 2007; Kannan & Tan, 2006; Vorhies & Morgan, 2005; Zou & Cavusgil, 2002). For the assortment criteria, 40 criteria were selected from previous retail buying research studies (i.e., Duncan, 1972; Kang & Kincade, 2004; Mantrala et al., 2009; Nilsson & Host, 1987; Silver et al., 1998; Sheth, 1981; Swindley, 1992). After two pilot tests – 27 American fashion merchandising students and 5 Korean practitioners – and preliminary interviews with 5 Korean practitioners, the most important assortment criteria (N=13) were selected. These criteria were supported from Mantrala et al.'s (2009) model and three previous research studies (i.e., Duncan, 1972; Kang & Kincade, 2004; Silver et al., 1998), two textbooks (i.e., Kincade & Gibson, 2010; Nilsson & Host, 1987), and preliminary interviews. Based on the feedback from the pilot tests and interviews, the instrument was revised and corrected to improve the clarity of the questions and to increase the content validity of the measurement instrument. The questionnaire was developed first in English and then translated to Korean. Lastly, the Korean version of the questionnaire was translated back to English to check its validity and reliability. Participants were asked the following question in regards to the decision factors: When you conduct assortment planning this year, how important were the following items? The following Likert scale was used: 1. Least important, 2. Less important, 3. More important, and 4. Most important. Each of the 13 criteria were covered by two detailed items which totaled to 26 items. The specific source for each of the 26 items asked is listed as follows: (a) Budget, Open-to-buy dollars (Kang & Kincade, 2004; Mantrala et al., 2009), (b) Brand image, Brand position in the market (Mantrala et al., 2009; Nilsson & Host, 1987), (c) Characteristics of target customer, Demand of target customer (Duncan, 1972; Mantrala et al., 2009; Kang &

Kincade; Kincade & Gibson, 2010), (d) Competitors' products, Competitors' assortment planning (Duncan, 1972; Mantrala et al., 2009; Nilsson & Host, 1987), (e) Economic condition of the store's region, Customers' disposable income (Kang & Kincade, 2004; Mantrala et al., 2009; Nilsson & Host, 1987), (f) Evaluation of suppliers, Relationship with suppliers (Duncan, 1972; Kang & Kincade, 2004; Nilsson & Host, 1987), (g) Fashion trend information, Current fashion trends (Kang & Kincade, 2004), (h) Floor space, Number of stores (Kang & Kincade, 2004; MAntrala et al., 2009), (i) Forecasting information for weather, Unpredicted weather change (Kang & Kincade, 2004; Preliminary Interviews), (j) Product costs, Markups of products (Mantrala et al., 2009; Nilsson & Host, 1987; Swindley, 1992; Preliminary Interviews), (k) Remaining stock level, Overall inventory (Kang & Kincade, 2004; Silver et al., 1998), (l) Salability of products, Selling season of products (Kang & Kincade, 2004; Nilsson & Host, 1987), (m) Sales history, Previous years of sales of same/similar styles (Kang & Kincade, 2004).

The demographic questions selected from Arbuthnot's (1997) study included research questions regarding demographics about the retail buyers and the characteristics of the retail firms. Arbuthnot's (1997) demographic questions were created for small retailers; therefore, the question for this study in regards to size of the firm was revised to be inclusive of data for large, medium, and small retailers. In addition, questions regarding types of clothing products the company carries and for which the buyer is responsible were added to this study. The background questions included multiple-choice questions about the buyer's characteristics as follows: age, gender, education, years of experience, and years of employment with the current retail firm. The characteristics of the company include the following variables: types of products (women's, men's children's, other) and size of the firm.

To test <hypotheses 1> and <hypotheses 2>, descriptive statistics were used (see <Table 3> and <Table 4>). To test the differences posited in <hypotheses 3> and <hypotheses 4>, factor analysis was used to reduce the data. The factors were then used with ANOVAs for comparisons.

4. Results

The majority of the respondents carried women's wear (81.4%) and 62.0% were female. The age of the respondents ranged from 24 years old and younger to 45 years old and older, and the largest age groups were 30 – 34 years old (34.2%) and 35-39 years old (24.9%, see <Table 2>).

<Table 2> Demographic Information (N=237)

Demographic Variable	Category	Frequency (N=237)	Percent (%)
Gender	Male	90	38.0%
	Female	147	62.0%
	Total	237	100.0%
Age	24 years and younger	6	2.5%
	25-29 years old	51	21.5%
	30-34 years old	81	34.2%
	35-39 years old	59	24.9%
	40-44 years old	30	12.7%
	45 years and older	10	4.2%
	Total	237	100.0%
Type of Products	Men's wear	44	18.6%
	Women's wear	193	81.4%
	Total	237	100.0%

4.1. Comparison on criteria importance between men's wear and women's wear buyers (<H1>)

When comparing means of each item between men's wear and women's wear buyers, both groups rated salability of products and selling season of products (i.e., both descriptors of sales) as the most important criteria when they make assortment decisions (see <Table 3>). The assortment item that showed the greatest difference between men's wear and women's wear buyers was demand of target customers (men's wear buyers M=2.75, women's wear buyers M=3.21). Out of all 26 items (i.e., two sets of 13 criteria), 19 men's wear buyers' mean scores were lower than women's wear buyers' mean scores, and the average mean score of all 26 criteria of men's wear buyers (M =2.90) was lower than women's wear buyer's mean score (M=2.98). The finding supports the hypothesis that overall men's wear buyers consider assortment criteria as less important than women's wear buyers do. However, the men's wear buyers' mean scores of six items (i.e., overall inventory, number of stores, evaluation of suppliers, economic condition, relationship with suppliers, customers' disposable income) were rated higher than women's buyers' mean scores; therefore, <H1> was only partially supported.

<Table 3> Assortment decision items rated by degree of importance for men's wear vs. women's wear

Decision item	Mean (Men's wear retail buyers, N=44)	Mean (Women's wear retail buyers, N=193)
Salability of products	3.43	3.49
Selling season of products	3.39	3.39
Overall inventory	3.36	3.32
Markups of products	3.25	3.27
Current fashion trends	3.16	3.25

Decision item	Mean (Men's wear retail buyers, N=44)	Mean (Women's wear retail buyers, N=193)
Brand image	3.14	3.21
Sales history	3.09	3.31
Budget	3.07	3.16
Characteristics of target customer	3.00	3.32
Brand position in the market	2.97	2.97
Number of stores	2.95	2.64
Product costs	2.95	3.20
Fashion trend information	2.90	3.09
Evaluation of suppliers	2.90	2.77
Forecasting information for weather	2.84	2.94
Previous year's sales of same/similar styles	2.84	3.07
Competitors' products	2.80	2.84
Demand of target customer	2.75	3.21
Relationship with suppliers	2.73	2.67
Economic condition of the store's region	2.66	2.55
Remaining Stock level	2.59	2.87
OTB	2.59	2.87
Unpredicted weather change	2.52	2.73
Customers disposable income	2.48	2.46
Floor space	2.48	2.50
Competitor's assortment planning	2.45	2.50
MEAN	2.90	2.98

Note: Likert scale was used with the items: 1. Least important, 2. Less important, 3. More important, and 4. Most important.

4.2. Comparison on criteria importance between male and female buyers (<H2>)

When comparing mean scores of each assortment item between male buyers and female buyers, both groups rated salability of products and selling season of products as the most important items (i.e., note: both items of the same criterion; see <Table 4>). In contrast, the item that showed the greatest difference in mean scores between male and female retail buyers was previous year's sales of same/similar item (male buyers M=2.82, female buyers M=3.15). Out of 26 items, 22 male buyers' mean scores were lower than female buyers' mean scores, and the average mean score of all 26 criteria of male buyers (M=2.89) was lower than female buyer's mean score (M=3.02). The finding supports the hypothesis that overall, male buyers consider assortment criteria to be less important than female buyers do. However, the male buyers' mean scores of three items (i.e., relationship with suppliers, floor space, customers' disposable income) were higher than the female buyers' mean scores; therefore, <H2> was partially supported.

<Table 4> Assortment decision items rated by degree of importance for Male vs. Female

Decision item	Mean (Male retail buyers, N=90)	Mean (Female retail buyers, N=147)
Salability of products	3.39	3.54
Selling season of products	3.30	3.45
Overall inventory	3.27	3.37
Characteristics of target customer	3.27	3.27
Current fashion trends	3.20	3.26
Brand image	3.19	3.20
Markups of products	3.19	3.31
Budget	3.07	3.19
Product costs	3.10	3.19
Sales history	3.10	3.37
Fashion trend information	3.02	3.08
Demand of target customer	2.99	3.20
Brand position in the market	2.91	3.01
Previous year's sales of same/similar styles	2.82	3.15
Forecasting information for weather	2.79	3.01
OTB	2.78	2.84
Remaining Stock level	2.73	2.87
Evaluation of suppliers	2.72	2.84
Competitors' products	2.71	2.91
Relationship with suppliers	2.69	2.67
Number of stores	2.64	2.73
Floor space	2.51	2.49
Unpredicted weather change	2.49	2.81
Economic condition of the store's region	2.48	2.63
Customers disposable income	2.47	2.46
Competitor's assortment planning	2.39	2.56
MEAN	2.89	3.02

Note: Likert scale was used with the items: 1. Least important, 2. Less important, 3. More important, and 4. Most important.

4.3. Factor analysis

The 26 items were factored to extract the reduced number of latent variables from the observed variables by grouping them based on similar variability. The results of the factor analysis recognized six criteria groups with an Eigen-value of 1.0 or higher and accounted for 64.46% of the total variance. This finding clears the threshold that Malhotra (1993) suggested as the total variance of factorial items should account for at least 60% of the variance.

The results shown in <Table 5> reveal that 19 out of 26 items significantly load on one of the six criteria groups. These criteria groups were assigned labels based on their content and previous groupings of assortment planning criteria: (1) Budget, Inventory, and Profit Group (BIPG), (2) Brand, Competitor, and Fashion trend Group (BCFG), (3) Weather Group (WG), (4) Sales History Group (SHG), (5) Suppliers Group (SG), and (6) Floor space and Store Group (FSG).

<Table 5> Factor analysis and reliability of assortment criteria

Factor labels and assortment criteria	Factor loading	Eigenvalues	Percentage of variance	Cronbach's alpha
Budget, Inventory, and Profit				
Overall inventory	0.763	5.44	28.65	0.76
Markups of products	0.695			
Budget	0.686			
Product costs	0.659			
Open-to-buy dollars	0.533			
Brand, competitor, and Fashion trend				
Competitor's assortment planning	0.761	1.80	9.47	0.76
Competitor's products	0.717			
Brand image	0.616			
Brand position in the market	0.576			
Current fashion trends	0.560			
Weather				
Forecasting information for weather	0.828	1.55	8.13	0.73
Unpredicted weather change	0.774			
Sales history				
Previous year's sales of same/similar styles	0.790	1.34	7.03	0.67
Sales history	0.757			
Suppliers				
Evaluation of suppliers	0.841	1.12	5.90	0.76
Relationship with suppliers	0.837			
Floor space and Stores				
Floor space	0.795	1.00	5.28	0.52
Number of stores	0.672			

<Table 6> Convergent and discriminant validity

	Budget, Inventory, and Profit	Brand, Competitors, and Fashion trend	Weather	Sales history	Suppliers	Floor space and Stores
Budget, Inventory, and Profit	0.45	0.51**	0.35**	0.32**	0.38**	0.26**
Brand, Competitors, and Fashion trend		0.42	0.38**	0.35**	0.37**	0.25**
Weather			0.54	0.27**	0.39**	0.32**
Sales history				0.60	0.16*	0.31**
Suppliers					0.70	0.21**
Floor space and Stores						0.54

Note: The numbers in diagonal are the average variance extracted for each variable. The numbers above diagonal are the squared correlation coefficients between the variables.

** $p < 0.01$ * $p < 0.05$

<Table 6> contains the analysis results of overall satisfactory convergent validity with average variance extracted (AVE) mostly greater than 0.5 of total variance (Fornell & Larcker, 1981). In exception to the threshold given, two criteria groups with AVE below 0.5 (i.e., BIPG, C) were accepted because this is an exploratory study and they are close to 0.5. Discriminant validity between constructs was also assessed by comparing the AVEs with squared correlation coefficients. All AVEs were greater than the squared correlation coefficients, and all correlation coefficients were below 0.4 except only one correlation coefficient (i.e., between BIPG and BCFG), providing overall support for discriminant validity (Hair et al., 1998).

4.4. Difference in consideration of assortment decision criteria between men's wear retail buyers and women's wear retail buyers (<H3>)

<H3> proposed differences in the importance level of assortment criteria when retail buyers make assortment decisions between men's wear retail buyers and women's wear retail buyers. Using the six factor groups with an ANOVA, a significant difference was noted when Sales History Group (SHG) values were compared between the two buyer groups as identified by products purchased (men's wear vs women's wear; F=4.85, p<0.05). The finding supports the hypothesis that men's wear retail buyers consider SHG to be less important than women's wear retail buyers do when they make assortment decisions (men's wear M=2.97, women's wear M=3.19). Other criteria groups had no significant differences between the two retail buyer groups. Therefore, <H3> was partially supported.

4.5. Difference in consideration of assortment decision criteria between male retail buyers and female retail buyers (<H4>)

<H4> proposed differences between male and female retail buyers in the importance level of assortment criteria when retail buyers make assortment decisions. <Table 7> indicated that significant differences existed between the two buyer groups when the buyers consider Weather Group(WG)

and Sales History Group (SHG; F=4.36, p<0.05; F=14.27, p < 0.001). When they make assortment decisions, male retail buyers consider WG (male M=2.58, female M=2.76) and SHG (male M=2.96, female M=3.26) as less important than female retail buyers do. Other criteria groups had no significant differences between the two retail buyer groups. Therefore, <H4> was partially supported.

5. Conclusions and Discussion

The purpose of this study was to examine differences in consideration of assortment decision criteria between men's wear and women's wear retail buyers as well as between male and female retail buyers. In this study, salability of products and selling season of products were rated as the items considered as most important for assortment planning decisions by both men's wear and women's wear retail buyers and by both male and female retail buyers. In addition, men's wear buyers considered overall assortment criteria to be less important than women's wear buyers did. Out of the 26 items within the assortment criteria, women's wear retail buyers considered 19 items to be more important than men's wear buyers did while men's wear buyers considered only six items as more important than women's wear buyers did. The six items include overall inventory, number of stores, evaluation of suppliers, relationship with suppliers, economic condition, and customers' disposable income. This contrast finding may be explained as the following:

<Table 7> ANOVA results (Men's wear vs. Women's wear retail buyers)

Criteria group	df	F	Men's wear buyers(N=44)		Women's wear buyers (N=147)	
			Mean	SD	Mean	SD
Budget, Inventory, and Profit	1	1.67	3.05	0.58	3.16	0.51
Competitors, Brand, and Fashion Trend	1	0.34	2.90	0.55	2.96	0.52
Weather	1	0.8	2.61	0.55	2.71	0.63
Sales History	1	4.85*	2.97	0.63	3.19	0.60
Suppliers	1	0.48	2.80	0.72	2.72	0.75
Floor Space and Stores	1	1.65	2.72	0.59	2.57	0.67
Note: * p < 0.05						

<Table 8> ANOVA results (Male vs. Female retail buyers)

Criteria group	df	F	Male buyers (n=90)		Female buyers (n=147)	
			Mean	SD	Mean	SD
Budget, Inventory, and Profit	1	1.84	3.08	0.60	3.18	0.51
Competitors, Brand, and Fashion Trend	1	2.28	2.88	0.55	2.99	0.52
Weather	1	4.36*	2.58	0.65	2.76	0.63
Sales History	1	14.27***	2.96	0.63	3.26	0.56
Suppliers	1	0.24	2.71	0.77	2.76	0.74
Floor Space and Stores	1	0.15	2.58	0.67	2.61	0.67
Note: * p < 0.05 *** p < 0.001						

men's wear retail buyers tend to consider "traditional criteria" such as the number of stores and inventory with "external criteria" such as economic condition, customers' disposable income, and suppliers to be more important than women's wear buyers do. This result is consistent with findings from Bahng and Kincade (2014) that retail buyers who carry men's wear consider that most assortment criteria are less important in their assortment planning decisions than retail buyers who buy women's wear. Those researchers postulated that men's wear is less volatile and more conservative than women's wear so fewer criteria are important for assortment planning. Another result of this study, pertinent to retail operations, is that men's wear retail buyers rated the item, demand of target customers (M=2.71), lower than evaluation of suppliers (M=2.90) that score is even lower than the average mean score of all 26 items (M=2.90). In addition, female retail buyers rated overall assortment criteria higher than male buyers did. Out of 26 items, female buyers considered 22 items as more important than male buyers did. Male retail buyers rated only three items (i.e., relationship with suppliers, floor space, disposable income) as higher than female buyers did. These three items fall into either "traditional criteria" or "external criteria categories."

Male retail buyers rated previous year's sales of same/similar styles (M=2.82) lower than the average of all items (M=2.89), and the mean score has the greatest difference from female buyers' mean of the item (M=3.15). Previous sales data are often exampled as important criteria for assortment planning (Kincade & Gibson, 2010). In these results, a significant difference in consideration of sales history criteria exists between men's wear and women's wear buyers. As an interpretation of this finding is that both men's wear and women's wear retail buyers consider sales history criteria as important, but women's wear buyers may be more dependent on sales history when they make assortment plans than men's wear buyers are. This result was unexpected because generally men's wear contains a lower variety of designs and fewer new trends than women's wear does. With more consistency of styles, men's wear buyers should consider past data of sales history and previous years of sales of same/similar styles to be more important than consideration by women's wear buyers. Perhaps, men's wear buyers' dependency on their suppliers, and possible assortment sets recommended by the vendor, preempts these buyers' use of previous sales data. Future reasons for this contrast is pertinent for future study.

As for gender differences for consideration in assortment criteria, female buyers considered not only sales history but also weather related criteria (i.e., forecast information for weather, unpredicted weather change) as more important than male buyers did. In the findings, unpredicted weather change showed a bigger difference between mean scores (male buyers M=2.49, female buyers M=2.81) than forecast information for weather. This gender difference may be associated with the results of some clothing related studies that women are more sensitive to weather (i.e., the cold) than men are (Von Mackensen et al., 2005; Whimn, 2016). This result also supports the findings of Bahng and Kincade (2012) that temperature, one of critical weather variables, can impact sales of women's seasonal garments, so weather variables (i.e., temperature) should be considered when planning assortments. The sensitivity of weather affects consumers' buying behavior, and this personal experience may have an influence on female buyers' assortment decisions on weather criteria.

6. Contributions and Implications

This study contributes to retail buying behavior literature by validating empirically important assortment criteria for clothing retail buyers and the differences between men's wear and women's wear retail buyers as well as between male and female retail buyers. Findings confirmed that differences in consideration of assortment criteria does exist by retail buyers' gender and by what products the retailers carry – men's wear or women's wear. Overall information from this study may assist clothing retail buyers and others who make assortment plans in selecting and considering criteria when they make assortment plans. In addition, the results of the study may provide insight and ideas for making assortment decisions by organizing assortment criteria from the most important one to the least important one and by grouping criteria.

The findings of the study may be more helpful for retail buyers, merchandisers, or store owners with less experience because they may need more guidelines on how to make assortment plans and how to purchase products for their business than practitioners with more experience. However, the results of the study may be useful for experienced retail buyers because they can continue to upgrade their assortment plans and retail buying behavior by comparing their use of assortment criteria with other retail buyers. For example, men's wear retail buyers rated demand of target customer much lower than women's wear buyers did and even lower than average of all criteria. Buyers of men's wear may need to reconsider demand of target customers when making assortment decisions because in a consumer-centric era, retail buyers' assortment plans with a lack of consideration of target customers' demand may cause a dissatisfactory financial performance for a firm. In addition, this study may help male buyers realize that they may not be giving a sufficient level of importance to some assortment criteria, such as previous year's sales data of same/similar styles.

Finally, the research findings offer opportunities for retail buyers to understand each gender's buying behavior. For instance, female retail buyers considered weather related

criteria more importantly than male buyers. Acknowledging this difference and seeking reasons for the difference may help male retail buyers understand female consumers' shopping behaviors. When male retail buyers make assortment plans for women's wear, the findings can be used for assisting with their assortment decisions. Besides retailers, the results of this study may be useful for manufacturers and wholesalers because understanding retail buyers' buying behavior, how much they consider which criteria may enable them to suggest better selection of products/service to their customers (i.e., retail buyers). In addition, faculty who teach assortment buying may find the criteria, items and factors useful in their instruction about buying and in their understanding of students' acceptance of the criteria.

7. Limitations and Suggestions

The survey for this study was conducted in Seoul, South Korea. Although the foundation of the Korean retailing sector has many similarities to the retail industry of other countries (e.g., U.S., Japan), the assortment criteria for clothing retailers in South Korea may include some additional criteria because the criteria that were used in the study were mostly drawn from previous work that was primarily based in Western countries. Even with study work in Korea, some additional criteria or variance in wording might be suggested. In addition, with findings based on Korean buyers, future studies conducted in Western countries (e.g., U.S.) can verify the current findings and expand the scope of the findings.

This study used convenience and snowball sampling for identifying clothing retail buyers, merchandisers, and storeowners who carry men's wear or women's wear products because this method is effective and efficient for contacting retail firms and is often employed in management research studies. Due to the use of this sampling method, the results of this study may not be generalized to the population of all clothing retail buyers, merchandisers, and storeowners. Future studies could use random samples that are more representative of the population of study to increase the external validity. The sample size (N=237) and disparity of the numbers of participants between men's wear (N=44) and women's wear retail buyers (N=193) could be improved in future studies with other sampling methods to increase statistical power and validity. Finally, future studies comparing consideration of assortment decision criteria between clothing retail buyers by age categories and other characteristics of participants (e.g., companies located in different cities or countries) are suggested to validate and extend the current findings.

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